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3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

EXAMINER

MERCHANT, SHAHID R

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/824,055
Filing Date: April 14, 2004
Appellant(s): NEWPORT, WILLIAM T.

Gero G. McClellan, Reg. No. 44,227

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 6, 2008 appealing from the Office action mailed September 6, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20030229567	SERKIN	12-2003
20030225673	HUGHES	12-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 rejected under 35 U.S.C. 102(e) as being anticipated by Serkin et al, U.S. Patent Application Publication 2003/0229567 (see PTO-892, Ref. A).

3. As per claim 1, Serkin teaches a computer-implemented method for dynamically scaling order processing in a securities exchange, comprising:

maintaining one or more books for a security at the securities exchange, wherein the one or more books each list orders related to the security (see paragraph 31);

monitoring a volume of orders related to the security received at the securities exchange (see paragraph 47);

varying the number of books maintained for the security based on the monitored volume of orders (see paragraph 47);

distributing orders related to the security and received at the securities exchange among the books maintained for the security (see paragraphs 45-47); and
balancing the monitored order volume among the books (see abstract).

4. As per claim 2, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein varying the number of books maintained for the security based on the monitored volume of orders comprises:

upon determining if the monitored volume of orders related to the security exceeds a maximum threshold value (see paragraph 47);
opening a new book for the security (see paragraph 47).

5. As per claim 3, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein opening a new book for the security comprises creating a logical partition (see paragraph 47).

6. As per claim 4, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein opening a new book for the security comprises allocating one or more processors to the new book (see paragraphs 46-47).

7. As per claim 5, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein varying the number of books maintained for the security based on the monitored volume of orders further comprises:

upon determining if the monitored volume of orders related to the security falls below a minimum threshold value (see paragraphs 46-47);

closing one or more books maintained for the security (see paragraphs 46-47).

8. As per claim 6, Serkin teaches the method of claim 5 as described above. Serkin further teaches wherein the maximum threshold value and the minimum threshold values are different (see paragraph 47).

9. As per claim 7, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein maintaining one or more books for the security at the exchange comprises maintaining at least one book for the security on at least two different servers (see paragraph 46).

10. As per claim 8, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein monitoring the volume of orders related to the security received at the exchange comprises dividing the total volume of orders related to the security received at the exchange by the number of books maintained for the security (see paragraphs 31 and 45-47).

11. As per claim 9, Serkin teaches the method of claim 1 as described above. Serkin further teaches further comprising publishing the top of each book maintained for the security (see paragraphs 3, 5, 36, 37 and 42).

12. As per claim 10, Serkin teaches the method of claim 9 as described above. Serkin further teaches further comprising matching an order listed on one of the books maintained for the security with one of the other books maintained for the security (see paragraphs 40, 41 and 43).

13. As per claim 11, Serkin teaches the method of claim 9 as described above. Serkin further teaches further comprising matching an order listed on one of the books maintained for the security with a book maintained for the security at another exchange (see paragraph 32).

14. Claims 12 and 17 are in parallel with claim 1 and are rejected for at least the same reason as set forth above (see also paragraphs 67 and 68).

15. Claims 13 and 14 are in parallel with claim 2 and are rejected for at least the same reason as set forth above.

16. As per claim 15, Serkin teaches the computer-readable of claim 12 as described above. Serkin further teaches comprising providing an interface allowing an administrator to specify the maximum threshold value (see paragraph 47).

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17. Claim 16 is in parallel with claim 8 and is rejected for at least the same reason as set forth above.

18. As per claim 18, Serkin teaches the computer system of claim 17 as described above. Serkin further teaches wherein the one or more books maintained for the security at the exchange comprises:

at least a first book for the security maintained on a first server; and

at least a second book for the security maintained on a second server (see paragraph 46).

19. As per claim 19, Serkin teaches the computer system of claim 17 as described above. Serkin further teaches wherein the one or more books are maintained on a computer system having multiple logical partitions (see paragraph 47).

20. As per claim 20, Serkin teaches the computer system of claim 19 as described above. Serkin further teaches wherein each book is assigned to a different logical partition (see paragraph 47).

(10) Response to Argument

Appellant's Argument

Appellant argues that Serkin does not teach one or more books for a security at the securities exchange, wherein the one or more books each list orders related to the security.

Examiner's Answer

Serkin teaches one or more books for a security at the securities exchange, wherein the one or more books each list orders related to the security in paragraph 31 as shown below.

[0031] Referring to FIG. 1, there is shown an order routing system 10 that directs received orders, for buying or selling securities 12, to a securities processor (e.g., securities processor 14) that is assigned to a specific security. Order routing system 10 is incorporated into and part of a computerized trading system 16 that trades securities, including the specific security that is the subject of received order 12. The securities processor processes the security order and effectuates the trading of the security. By assigning certain securities to certain securities processors, a single securities processor is not required to process all of the orders handled by the computerized trading system 16. Accordingly, load balancing of the individual securities processors within the system can be controlled and the overall efficiency and throughput of the system is enhanced.

It can be seen from the underlined sections above, that Serkin provides one or more securities processor (book) for a specific security that is being bought or sold. Each security processor or book as referenced by the Appellant is assigned a specific security. For example, any buy or sell orders for GM stock would be routed to a specific security process or book. Further, if many orders for GM stock start coming in, then the system can adjust or load balance the securities processor to handle the incoming orders efficiently. Examiner notes that Serkin's securities processor and Appellant's book are equivalent because they perform the same function even though they are labeled differently. Next, Serkin teaches wherein the one or more books each list

orders related to the security. Referring back to paragraph 31 shown above, Serkin teaches this limitation. The order routing system routes incoming orders for a security (i.e. GM stock) to a securities processor (book) that is assigned a specific security.

Appellant's Argument

Appellant argues that Serkin does not teach a computer-implemented method for dynamically scaling order processing in a securities exchange that includes varying the number of books maintained for the security based on the monitored volume of orders.

Examiner's Answer

A closer analysis of claim 1 reveals that the Appellant cites in the preamble A computer-implemented method..., however it is not positively recited that a computer or processor performs each and every step in the body of the claim. For example, it is not positively recited that a computer or processor performs the action of maintaining, monitoring, varying, distributing and balancing and further that it is done automatically. In fact, Appellants own specification describes an administrator varying the number of books maintained for the security based on the monitored volume of orders (see paragraph 31). Giving claim 1 the broadest reasonable interpretation in light of the specification, one of ordinary skill in the art would interpret claim 1 as meaning that the method steps of maintaining, monitoring, varying, distributing and balancing are performed using a computer, however it is not recited that the computer would perform these actions or steps automatically. In addition, even if claim 1 was interpreted narrowly having a computer perform all the steps automatically, it would have been an obvious modification to Serkin's invention.

Serkin recites throughout the disclosure numerous references to computers, processors, servers and computer systems for using and performing the invention. For example, in the abstract, Serkin teaches “A system in an electronic securities market...plurality of securities to one or more securities processors in the system...sends the received security order to the securities processor to which the specific security is assigned.” In addition, Figure 1 shows the computerized trading system, item 16 and item 18. Next, Serkin discloses in paragraph 31, “Referring to FIG. 1, there is shown an order routing system 10 that directs received orders, for buying or selling securities 12, to a securities processor (e.g., securities processor 14) that is assigned to a specific security. Order routing system 10 is incorporated into and part of a computerized trading system 16 that trades securities, including the specific security that is the subject of received order 12. The securities processor processes the security order and effectuates the trading of the security. By assigning certain securities to certain securities processors, a single securities processor is not required to process all of the orders handled by the computerized trading system 16. Accordingly, load balancing of the individual securities processors within the system can be controlled and the overall efficiency and throughput of the system is enhanced.” It is evident from the abstract, paragraph 31 and Figure 1 that Serkin utilizes a fully computerized method for securities processing that includes monitoring a volume of orders related to a security received at a securities exchange and balancing the order volume among the books.

Appellant points to paragraph 47 of Serkin as evidence that Serkin uses an administrator to perform a manual step of varying the number of books maintained for

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the security based on the monitored volume of orders. The administrator uses computers and processors (not a pencil and paper) to vary the number of books maintained for the security based on the monitored volume of orders, so therefore it is considered a computer-implemented method that reads on Appellants claim 1.

Next, Serkin teaches the use of an executable program to monitor the volume of orders related to the security received at the securities exchange and vary the number of books maintained for the security based on the monitored volume of orders. Serkin teaches the use of a computer program in paragraph 33 as shown below.

[0033] The instruction sets and subroutines of order routing system 10 and securities processor 14 are typically stored on a storage device 28 connected to server 18. Additionally, computerized trading system 16 stores all information relating to securities trades on storage device 28. Storage device 28 can be a hard disk drive, a tape drive, an optical drive, a RAID array, a random access memory (RAM), or a read-only memory (ROM), for example.

One of ordinary skill in the art would know that instruction sets and subroutines are commonly known as computer programs. Further, computer programs are normally stored on some kind of memory storage device or readable medium. Serkin recites that the instruction sets and subroutines can be stored on hard disk drive, a tape drive, an optical drive, a RAID array, a random access memory (RAM), or a read-only memory (ROM).

Next, cited in paragraph 33, the instruction sets and subroutines for the order routing system and securities processor will monitor the volume of orders related to the security received at the securities exchange and vary the number of books maintained for the security based on the monitored volume of orders. Serkin teaches in paragraph 46 that look-up tables are reconfigurable, so there definitions can be reassigned as trading trends vary. For example, if trading activity increases for GM stock, an

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administrator can assign additional securities processor to process GM stock exclusively. Serkin's instruction sets and subroutines or computer program would allow the reconfiguration and addition of securities processors by an administrator at a computer as shown in Figure 1. Serkin's invention would allow an administrator or user to make certain decisions or input data in a computer that would make the invention do some positive action. As previously stated, it is not positively recited that a computer or process performs the action of maintaining, monitoring, varying, distributing and balancing and further that it is done automatically. Giving claim 12 the broadest reasonable interpretation in light of the specification, one of ordinary skill in the art would interpret claim 12 as meaning that the method steps of maintaining, monitoring, varying, distributing and balancing are performed using a computer program stored on a computer-readable medium, however it is not recited that the computer would perform these actions or steps stored on a computer-readable medium automatically.

Finally, Serkin teaches the essential components of the Appellants computer system consisting of a processor, one or more books maintained for a security and a memory containing an executable component in Figures 1 and 2 and paragraphs 31 to 34 as shown below (see underlined portions).

[0031] Referring to FIG. 1, there is shown an order routing system 10 that directs received orders, for buying or selling securities 12, to a securities processor (e.g., securities processor 14) that is assigned to a specific security. Order routing system 10 is incorporated into and part of a computerized trading system 16 that trades securities, including the specific security that is the subject of received order 12. The securities processor processes the security order and effectuates the trading of the security. By assigning certain securities to certain securities processors, a single securities processor is not required to process all of the orders handled by the computerized trading system 16. Accordingly, load balancing of the individual securities processors within the system can be controlled and the overall efficiency and throughput of the system is enhanced.

[0032] Order routing system 10 resides on a server 18 that is connected to network 20 (e.g., the Internet, an intranet, a local area network, some other form of network, etc.). Computerized trading system 16 trades securities electronically, processes trades (e.g., order 12) entered by various market participants (e.g., market participant 22). Market participant 22 typically accesses and uses computerized trading system 16 via a desktop application 24 (e.g., Microsoft Internet Explorer.TM., Netscape Navigator.TM., the Nasdaq Workstation II.TM., a specialized desktop interface, etc.) running on computer 26, thus allowing market participant 22 to trade securities with other market participants (not shown).

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[0033] The instruction sets and subroutines of order routing system 10 and securities processor 14 are typically stored on a storage device 28 connected to server 18. Additionally, computerized trading system 16 stores all information relating to securities trades on storage device 28. Storage device 28 can be a hard disk drive, a tape drive, an optical drive, a RAID array, a random access memory (RAM), or a read-only memory (ROM), for example.

[0034] Server 18 includes at least one central processing unit (not shown) and main memory system (not shown). Typically, server 18 is a multi-processing, fault-tolerant system that includes multiple central processing units that each have a dedicated main memory system or share a common main memory pool. While being executed by the central processing unit(s) of server 18, order routing system 10 and multiple instantiations of securities processor 14 reside in the main memory system of server 18. Further, the processes and subroutines of order routing system 10 and securities processor 14 may also be present in various levels of cache memory incorporated into server 18.

It is clear that Serkin incorporates the many components of a computer trading system including a processor, memory and electronic securities processors (books) as recited in Appellants claim 17.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Shahid R. Merchant/
Patent Examiner
Art Unit 3692

Conferees:

Kambiz Abdi /K.A/
Supervisory Patent Examiner
Art Unit 3692

Vincent Millin /V.M/
Appeals Practice Specialist